AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

(currently amended) Vertebral osteosynthesis equipment, comprising:

one or more bony anchoring members, at least one of said bony anchoring members comprising a proximal threaded stud and a base portion, the proximal threaded stud having a first end connected to the base portion and a free second end opposed to said first end, said base portion configured to anchor to a vertebra;

a linking rod;

a connecting part configured to engage with said proximal threaded stud of said at least one of said anchoring members, and further configured to connect to said linking rod thereby to connect said linking rod to said at least one of said anchoring members;

a nut configured to engage in threaded engagement with said proximal threaded stud to secure said connecting part; and

at least one extension piece having a head portion and an end distal portion opposed to said head portion, said end distal portion configured to connect to said free second end of said proximal threaded stud and to slidingly receive said

connecting part from the head portion to the end distal portion such that said connecting part may engage upon said proximal threaded stud,

wherein each of said head portion and said end distal portion have an outermost external diameter configured such that the nut, in coaxial engagement with said extension piece, slides freely over an entire length of said extension piece,

wherein said free second end of said proximal threaded stud has a first positioning element and said end distal portion of said extension piece has a second positioning element, said first and second positioning elements configured in a first mode to removably engage concentrically with each other and to position mount said end distal portion of said extension piece on said free second end of said proximal threaded stud, and said first and second positioning elements further configured in a non-engagement second mode to disengage from each other such that the extension piece is not mounted on said proximal threaded stud, and

wherein said nut is configured to cooperate with the proximal threaded stud to secure said connecting part at said first end.

2. (previously presented) The vertebral osteosynthesis equipment of claim 1,

wherein said first positioning element comprises a rod integral with the proximal threaded stud, and

wherein said second positioning means comprises a bore provided in the second end portion of the extension piece, and wherein said rod is adapted to engage in said bore.

- 3. (previously presented) The vertebral osteosynthesis equipment of claim 1, wherein said first and second positioning elements are configured to axially connect the proximal threaded stud with the extension piece.
- 4. (previously presented) The vertebral osteosynthesis equipment of claim 3, wherein the proximal threaded stud comprises a threaded proximal rod, and said end distal portion of the extension piece comprises a tapered hole configured to secure to the extension piece by threaded engagement with said threaded proximal rod.
- 5. (previously presented) The vertebral osteosynthesis equipment of claim 1, wherein the head portion of the extension piece is a flexible structure configured to be positioned askew to a direction of extension of the extension piece.

- 6. (previously presented) The vertebral osteosynthesis equipment of claim 5, wherein said flexible structure comprises a metal wire wound to have a spiral form.
- 7. (previously presented) The vertrebral osteosynthesis equipment of claim 6, wherein the spiral form of said metal wire comprises a plurality of contiguous spires.
- 8. (previously presented) The vertebral osteosynthesis equipment of claim 1, wherein said end distal portion is threaded to cooperate in threaded engagement with the nut.
- 9. (previously presented) The vertebral osteosynthesis equipment of claim 2, wherein said first and second positioning elements are configured to axially connect the proximal threaded stud with the extension piece.
- 10. (previously presented) The vertebral osteosynthesis equipment of claim 2, wherein the head portion of the extension piece is a flexible structure configured to be positioned askew to a direction of extension of the extension piece.

- 11. (previously presented) The vertebral osteosynthesis equipment of claim 3, wherein the head portion of the extension piece is a flexible structure configured to be positioned askew to a direction of extension of the extension piece.
- 12. (previously presented) The vertebral osteosynthesis equipment of claim 4, wherein the head portion of the extension piece is a flexible structure configured to be positioned askew to a direction of extension of the extension piece.

13-14. (canceled)

- 15. (previously presented) The vertebral osteosynthesis equipment of claim 1, wherein an outermost diameter of the end distal portion is smaller than an outermost diameter of the proximal threaded stud.
- 16. (previously presented) The vertebral osteosynthesis equipment of claim 1, wherein said extension piece is further configured to be removable from said proximal threaded stud upon implantation of said one or more bony anchoring members to a vertebra.

17. (previously presented) The vertebral osteosynthesis equipment of claim 1,

wherein said second positioning element comprises a rod integral with the proximal threaded stud, and

wherein said first positioning means comprises a bore provided in the second end portion of the extension piece, and wherein said rod is adapted to engage in said bore.

18. (previously presented) A vertebral osteosynthesis equipment, comprising:

a first bony anchoring member comprised of a proximal threaded stud and a base portion, the proximal threaded stud having a first end connected to the base portion and a free second end opposed to said first end, said base portion configured to anchor to a vertebra;

a connecting part configured to engage with said proximal threaded stud of said first bony anchoring member;

a linking rod configured to connect to said connecting part of said first bony anchoring member, and further configured to connect to a second bony anchoring member;

a nut configured to engage on said proximal threaded stud to secure said connecting part; and

an extension piece having a head portion and an end distal portion opposed to said head portion, said end distal

portion configured to connect to said free second end of said proximal threaded stud and to slidingly receive said connecting part from the head portion to the end distal portion such that said connecting part may engage upon said proximal threaded stud;

wherein each of said head portion and said end distal portion have an outermost external diameter configured such that the nut, in coaxial engagement with said extension piece, slides freely over an entire length of said extension piece.

wherein said free second end of said proximal threaded stud has a first positioning element and said end distal portion of said extension piece has a second positioning element, said first and second positioning elements configured to engage concentrically with each other and to position said end distal portion of said extension piece on said free second end of said proximal threaded stud, and

wherein said nut is configured to cooperate with the proximal threaded stud to secure said connecting part at said first end.

19. (previously presented) The vertebral osteosynthesis equipment of claim 18, wherein the head portion opposite said end distal portion is a flexible structure configured to be positioned askew to a direction of extension of the extension piece.

- 20. (previously presented) The vertebral osteosynthesis equipment of claim 19, wherein said flexible structure comprises a metal wire wound to have a spiral form.
- 21. (previously presented) The vertrebral osteosynthesis equipment of claim 20, wherein the spiral form of said metal wire comprises a plurality of contiguous spires.